

Making the Connection: Health and Student Achievement



Society of State Directors of Health,
Physical Education and Recreation
(SSDHPER)



Association of State and
Territorial Health Officials
(ASTHO)



Presentation Objectives

- Provide an overview of research on links between health status, health behavior, and academic achievement
- Gain a greater understanding of the influence of school health programs on student success

Is student health the missing piece in school reform?



Carnegie
Foundation

“Clearly, no knowledge is more crucial than knowledge about health. Without it, no other life goal can be successfully achieved.”

— Boyer, E.L., *The Carnegie Foundation for the Advancement of Teaching*, 1983

U.S.
Department
of
Education

“Too many of our children start school unready to meet the challenges of learning, and are adversely influenced by... drug use and alcohol abuse, random violence, adolescent pregnancy, AIDS, and the rest.”

— U.S. Department of Education. *America 2000: An Education Strategy Sourcebook.*

— Department of Education, 1991

Former
Surgeon
General
Dr. Antonia
Novello

“Health and education go hand in hand: one cannot exist without the other. To believe any differently is to hamper progress. Just as our children have a right to receive the best education available, they have a right to be healthy. As parents, legislators, and educators, it is up to us to see that this becomes a reality”

— *Healthy children ready to learn: An essential collaboration between health and education, 1992*

American Cancer Society

“[Children]...who face violence, hunger, substance abuse, unintended pregnancy, and despair can not possibly focus on academic excellence. There is no curriculum brilliant enough to compensate for a hungry stomach or a distracted mind.”

— National Action Plan for Comprehensive
School Health Education. 1992

Good Health is Necessary for Academic Success



It is
difficult
for students
to be
successful
in school if
they are:

- Depressed
- Tired
- Being bullied
- Stressed
- Sick
- Using alcohol or other drugs
- Hungry
- Abused

Coordinated school health programs are a solution



Coordinated school health programs are a solution

- Engage parents, teachers, students, families and communities
- Keep students healthy over time
- Support learning and school success
- Reinforce positive behaviors throughout the day
- Help students develop knowledge and skills to make smart choices

What is a coordinated school health program?



Components of a coordinated school health program

- Family and Community Involvement
- Comprehensive School Health Education
- Physical Education
- School Health Services
- Counseling, Psychological, and Social Services
- School Nutrition Services
- Healthy School Environment
- School-site Health Promotion for Staff

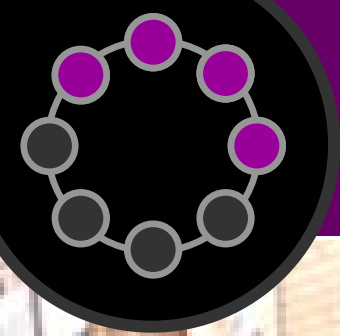
– Allensworth and Kolbe, 1987

Components of a coordinated school health program



How do the
components
of a
coordinated
school health
program
impact
behavior or
academic
achievement?



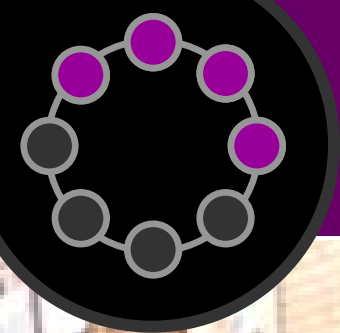


FAMILY & COMMUNITY INVOLVEMENT



- Partnerships among schools, families, community groups and individuals.
- Designed to share and maximize resources and expertise in addressing the healthy development of children, youth, and their families.

— *Health is Academic, 1998*



FAMILY & COMMUNITY INVOLVEMENT

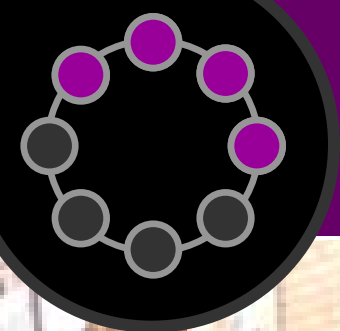


Students whose parents are involved in their education show:

- **Significant greater achievement gains in reading and math than students with uninvolved parents**
- **Better attendance**
- **More consistently completed homework**

— *Henderson, 1987*

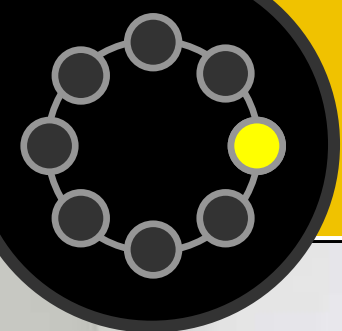
— *Shaver and Walls, 1998*



Community activities
that link to the classroom:

- **Positively impact academic achievement**
- **Reduce school suspension rates**
- **Improve school-related behaviors**

- *Nettles, 1991*
- *Allen, Philliber, Herring, and Kupermine, 1997*

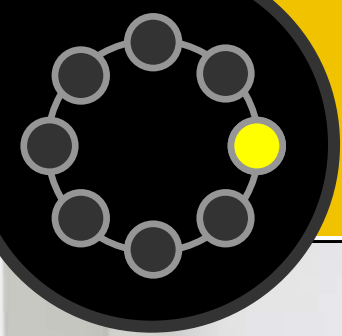


SCHOOL HEALTH SERVICES



- Preventive services, education, emergency care, referral and management of acute and chronic health conditions
- Designed to promote the health of students, identify and prevent health problems and injuries, and ensure care for students

— *Health is Academic, 1998*

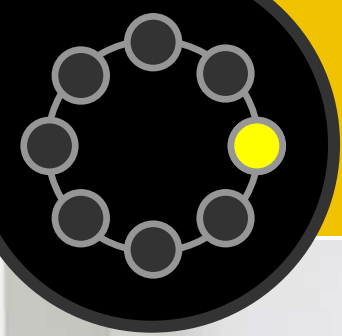


SCHOOL HEALTH SERVICES



- Early childhood and school aged intervention programs that provide parental support and health services are associated with improved school performance and academic achievement
- Early intervention may also improve high school completion rates and lower juvenile crime

— Reynolds, Temple, Robertson
and Mann, 2001



SCHOOL HEALTH SERVICES

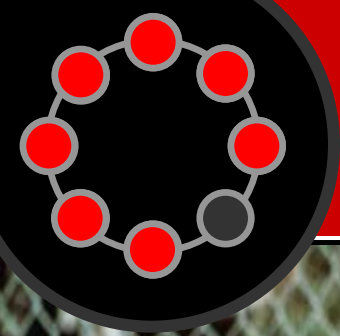


Schools with school-based health centers report:

- Increased school attendance
- Decreased drop-outs and suspensions
- Higher graduation rates

— McCord, Klein, Foy,
and Fothergill, 1993

— Walters, 1996

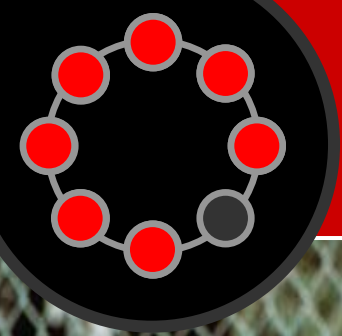


COUNSELING, PSYCHOLOGICAL, & SOCIAL SERVICES



- Activities that focus on cognitive, emotional, behavioral and social needs of individuals, groups, and families
- Designed to prevent and address problems, facilitate positive learning and healthy behavior, and enhance healthy development

— *Health is Academic, 1998*



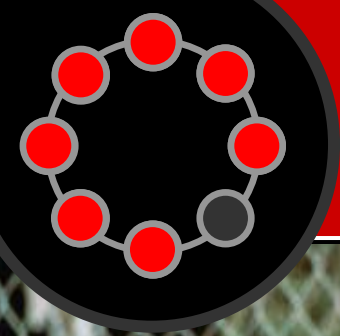
COUNSELING, PSYCHOLOGICAL, & SOCIAL SERVICES



A comprehensive intervention combining teacher training, parent education, and social competency training in children had long-term positive impacts including:

- **Enhanced greater commitment and attachment to school**
- **Less school misbehavior**
- **Better academic achievement**

— *Hawkins, Catalano,
Kosterman, Abbott, and Hill, 1999*



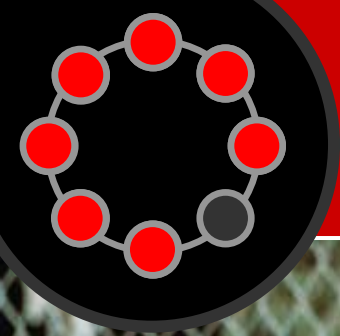
COUNSELING, PSYCHOLOGICAL, & SOCIAL SERVICES



A school-based social services program targeting students at risk for dropping out of school produced the following results:

- **Grade point average increased across all classes taken**
- **School bonding increased**
- **Self-esteem improved**

— Eggert, Thompson, Herting,
Nicholas, and Dicker, 1994

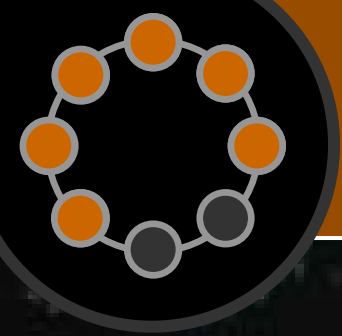


COUNSELING, PSYCHOLOGICAL, & SOCIAL SERVICES



- Children who participated in a social service intervention aimed at promoting student success by improving parent-child and parent-teacher communication resulted in improved academic performance

— *Bowen, 1999*

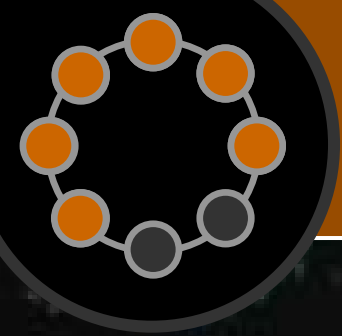


HEALTHY SCHOOL ENVIRONMENT



- The physical, emotional, and social climate of the school
- Designed to provide a safe physical plant, as well as a healthy and supportive environment that fosters learning

— *Health is Academic, 1998*

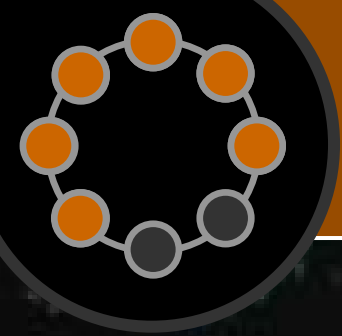


HEALTHY SCHOOL ENVIRONMENT



- The physical condition of a school is statistically related to student academic achievement
- An improvement in the school's condition by one category, say from poor to fair, is associated with a 5.5 point improvement in average achievement scores

— Berner, 1993



HEALTHY SCHOOL ENVIRONMENT



Students who develop a positive affiliation or social bonding with school are:

- **More likely to remain academically engaged**
- **Less likely to be involved with misconduct at school**

— *Simons-Morton, Crump, Haynie, and Saylor, 1999*



COMPREHENSIVE SCHOOL HEALTH EDUCATION



- Classroom instruction that addresses the physical, mental, emotional, and social dimensions of health; develops health knowledge, attitudes, and skills; and is tailored to each age level
- Designed to motivate and assist students to maintain and improve their health, prevent disease, and reduce health-related risk behaviors

— *Health is Academic, 1998*



COMPREHENSIVE SCHOOL HEALTH EDUCATION



Students who participate in health education classes that utilize effective curricula:

- **Increase their health knowledge and improve their health skills and behaviors**

— *Connell, Turner, and Mason, 1985*

- **Decrease risky behaviors relative to the program**

— *Botvin, Griffin, Diaz, Ifill-Williams, 2001*
— *Dent, Sussman, Stacy, Craig, Burton, and Flay, 1995*



COMPREHENSIVE SCHOOL HEALTH EDUCATION



- The reading and math scores of third and fourth grade students who received comprehensive health education were significantly higher than those third and fourth grade students who had not received comprehensive health education

— Schoener, Guerrero,
and Whitney, 1988

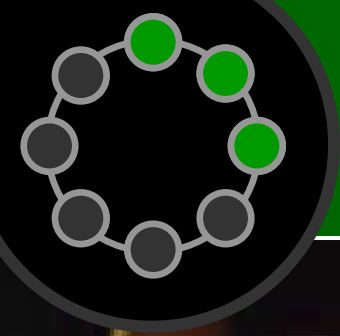


COMPREHENSIVE SCHOOL HEALTH EDUCATION



- 73% of adults from a nationally representative sample felt that health education in schools was “definitely necessary”

— *Mid-continent Research
for Education and Learning
Survey 1998*



COMPREHENSIVE SCHOOL HEALTH EDUCATION



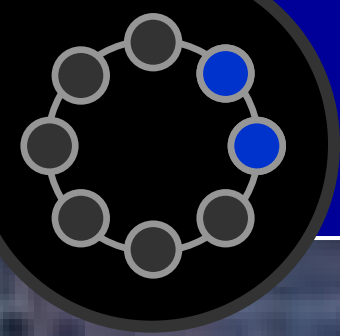
- Students who had received a two-year social decision-making and problem solving program in elementary school showed more pro-social behavior and less antisocial and self-destructive behaviors... when followed up in high school four to six years later

- *Elias, Gara, Schuyler,*
- *Branden-Muller, and Sayette, 1991*



- Planned, sequential instruction that promotes lifelong physical activity
- Designed to develop basic movement skills, sports skills, and physical fitness as well as to enhance mental, social, and emotional abilities

— *Health is Academic, 1998*



PHYSICAL EDUCATION



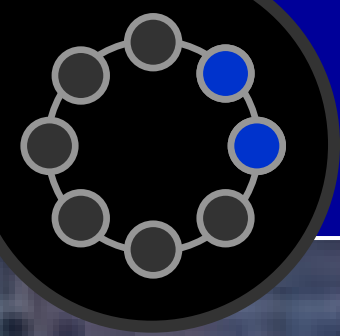
- Physical activity among adolescents is consistently related to higher levels of self-esteem and lower levels of anxiety and stress

— *Calfas and Taylor, 1994*



- **Students who participated in school physical education programs did not experience a harmful effect on their standardized test scores, though less time was available for other academic subjects**

- *Sallis, McKenzie, Kolody, Lewis, Marshall, and Rosengard, 1999*
- *Shephard, 1996*
- *Dwyer, Coonan, Leitch, Hetzel, and Baghurst, 1983*

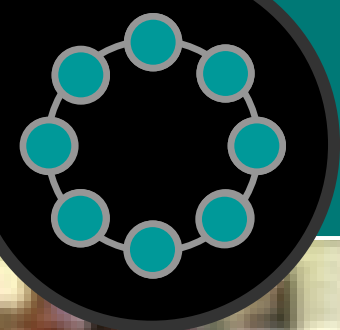


PHYSICAL EDUCATION



- Physical activity is positively associated with academic performance

— *Dwyer, Blizzard, and Dean, 1996*

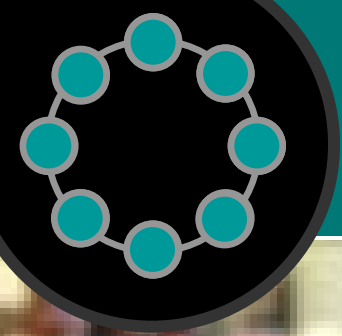


NUTRITION SERVICES



- Integration of nutritious, affordable, and appealing meals; nutrition education; and an environment that promotes healthy eating behaviors for all children
- Designed to maximize each child's education and health potential for a lifetime

— *Health is Academic, 1998*



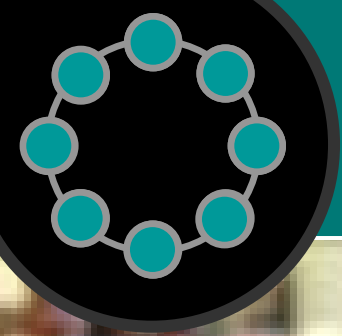
NUTRITION SERVICES



Food-insufficient children (ages 6-11) are more likely to:

- **receive lower math scores**
- **repeat a grade**
- **visit a psychologist**
- **have difficulty getting along with other children**

— *Alaimo, Olson, and Frongillo, 2001*



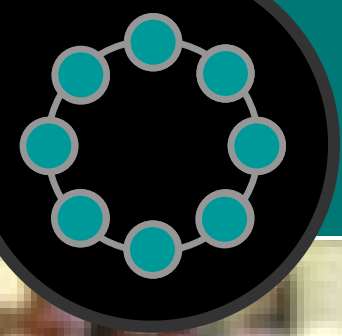
NUTRITION SERVICES



Food-insufficient teens (ages 12-16) are more likely to:

- **visit a psychologist**
- **be suspended from school**
- **have difficulty getting along with others**
- **have no friends**

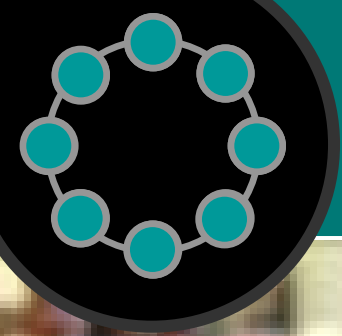
— *Alaimo, Olson, and Frongillo, 2001*



School breakfast programs:

- **increase learning and academic achievement**
- **improve student attention to academic tasks**
- **reduce visits to the school nurse**
- **decrease behavioral problems**

— *Murphy, Pagano, Nachmani,
Sperling, Kane, and Kleinman, 1998*

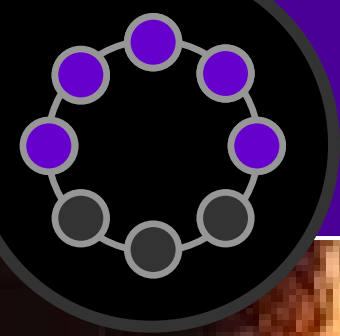


NUTRITION SERVICES



- School breakfast programs positively impact academic performance, absenteeism, and tardiness among low-income elementary school students

— Meyers, Sampson, Weitzman, Rogers, and Kayne, 1989

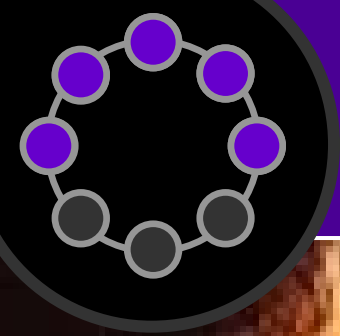


SCHOOL-SITE HEALTH PROMOTION FOR STAFF



- Assessment, education and fitness activities for school faculty and staff
- Designed to maintain and improve the health and well-being of school staff who serve as role models for children

— *Health is Academic, 1998*



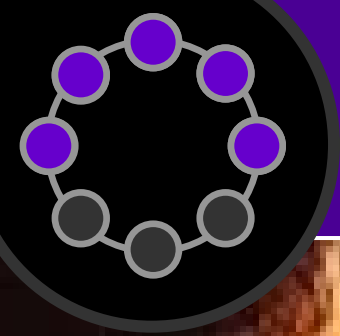
SCHOOL-SITE HEALTH PROMOTION FOR STAFF



Teachers who participated in a health promotion program focusing on exercise, stress management, and nutrition reported:

- **Increased participation in exercise and lower weight**
- **Better ability to handle job stress**
- **A higher level of general well-being**

— Blair, Collingwood, Reynolds, Smith, Hagan, and Sterling, 1984



SCHOOL-SITE HEALTH PROMOTION FOR STAFF



Students benefit from having healthy teachers because:

- Teachers are more energetic
- Teachers are absent less often
- The school climate is more optimistic

— Symons, Cummings,
and Olds, 1994

What do
other
national
organizations
and federal
agencies
say?



The
National
Association
of State
Boards of
Education
(NASBE)
says..

"Health and success in school are interrelated. Schools cannot achieve their primary mission of education if students and staff are not healthy and fit physically, mentally, and socially."

— *Fit, Healthy, and Ready to Learn: Part 1 –
Physical Activity, Healthy Eating, and Tobacco
Use Prevention, 2000*

The
National
Governors
Association
(NGA) says..

“Policymakers need to focus on eliminating the barriers that affect these lower-performing students’ readiness to learn. Among these barriers are physical and mental health conditions that impact students’ school attendance and their ability to pay attention in class, control their anger, and restrain self-destructive impulses.”

— Improving Academic Performance by
Meeting Student Health Needs, 2000

The U.S.
Department
of Health
and Human
Services
(HHS) says..

“Schools have more influence on the lives of young people than any other social institution except the family and provide a setting in which friendship networks develop, socialization occurs, and norms that govern behavior are developed and reinforced.”

— Healthy People 2010

Maddy, a
15-year-old
student from
Massachusetts,
says..

“I think schools could better promote the health of young people by talking more to adolescents about the hazards and how it effects them in many ways. I also think that schools should talk to students even when they are young. Most people think that young children don’t understand, but young children are listening.”

— NSBA School Health Programs Website,
<http://www.nsba.org/schoolhealth/youth.htm>

Leaders
like you
agree..



Leaders
like you
agree..

“Our district has seen first-hand what a well-rounded health program can accomplish for all children, pre-K through 12th grade. There is no question in the minds of (our) educators that a complete school health program positively affects student achievement.”

— Edward VandenBulke, Superintendent,
Stow-Munroe Falls City Schools

QUESTION:

What does
this all
mean?



ANSWERS!

Coordinated school health programs can impact students' academic achievement and increase healthy behaviors.

ANSWERS!

Coordinated school health programs empower students with the knowledge, skills, and judgment to help them make smart choices in life.

ANSWERS!

*Healthy kids make
better students, and
better students make
healthy communities.*

National Organizations Supporting Coordinated School Health Programs

- American Academy of Pediatrics
- American Alliance for Health, Physical Education, Recreation and Dance
- American Association for School Administrators
- American Cancer Society
- American College of Preventive Medicine
- American Dietetic Association
- American Heart Association
- American Psychological Association
- American Public Health Association
- American School Food Service Association

National Organizations Supporting Coordinated School Health Programs

- American School Health Association
- Association for Supervision and Curriculum Development
- Association of State and Territorial Chronic Disease Program Directors
- Association of State and Territorial Health Officials
- Council of Chief State School Officers
- Children's Environmental Health Network
- Girl Scouts of America
- National Assembly on School-Based Health Care

National Organizations Supporting Coordinated School Health Programs

- National Association of State and County Health Officials
- National Association of School Psychologists
- National Association of State Boards of Education
- National Education Association Health Information Network
- National School Boards Association
- Partnership for Prevention
- Society for Public Health Education
- Society of State Directors of Health, Physical Education and Recreation

and many others...

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About ASTHO

The Association of State and Territorial Health Officials (ASTHO) is the national non-profit organization representing the state and territorial public health agencies of the United States, the U.S. Territories, and the District of Columbia. ASTHO's members, the chief health officials of these jurisdictions, are dedicated to formulating and influencing sound public health policy and to assuring excellence in state-based public health practice.

For more information, please see www.astho.org, or contact ASTHO at 202-371-9090.

About SSDPHER

Established in 1926, the Society of State Directors of Health, Physical Education and Recreation is the professional association whose members supervise and coordinate programs in health, physical education, and related fields within state departments of education. Associate members are those who are interested in the goals and programs of the Society who do not work within a state education agency.

For more information, please see www.thesociety.org, or contact SSDHPER at 703-390-4599.

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